

This, too, must be had in mind in connexion with the Petrol Committee's work: that it has not made the mistake made by many other supplies controlling committees, here or in enemy country, of issuing licences for what is not obtainable. To date, motorists have always been able to purchase the petrol which their licences entitle them to buy, though a retailer here or there may be temporarily out of stock. There is reason to believe, moreover, that that policy will be pursued by the Committee as long as it is necessary for it to continue its work.

THE SPARE PARTS PROBLEM.

A correspondent who has been reading about the spare parts difficulty mentions that he intimated to the manufacturers of his car that he was sending his motorman to inquire about getting spare parts; they replied that they would not be able to supply him with any spare parts unless he specified exactly what would be required, as they could not say what parts would be wanted, were only working from hand to mouth, and had no bulk of goods to send out. This firm, therefore, will not deplete its stock of spare parts, a policy it is entitled to adopt if it pleases, and apparently it is not able to supply spare parts from stock, but is steadily driven to making them from hand to mouth. Therefore it does not come strictly under the category of those concerned with stocks of spare parts. Obviously, it is quite impossible to deal with the position of individual firms throughout the country. What one can do only is to deal with the situation generally. That has been done in these notes for months past. Furthermore, in the interval since the matter was first mentioned in these columns spare parts supplies have, of course, been drawn on almost continuously by all classes of users. Hence the present situation is that, certainly in the majority of cases, stocks are not available for drawing on, particularly at random. Whether a given manufacturer knows, or does not know, what parts are likely to be needed for spares, of course, depends entirely on the length of time the given model has been in use and the quantities in which it has been produced since. It is from such experiences only that the average can be ascertained. Moreover, inasmuch as the stripping of cars for examination is in some cases quite a profitable enterprise, certain firms are not willing to give advice as to what spare parts are needed without themselves examining the car and charging the usual fee for the stripping and re-assembling operations. For the rest, the only advice that can be given is that which was printed in these columns quite recently—namely, that such parts as the bevel or worm of the back axle; possibly the second or third speed of the gearbox; perhaps the steering segment, or piston rings, are the sorts of parts that are most likely to wear out first in an ordinary car properly treated. Wear is usually gradual, hence often the given part gives notice of the fact, as by slackness or noise. Then it is as well to replace it for fear of a breakage. These are the only hints which are at all applicable in a general way. For the rest, I gravely doubt if at this time any maker has a stock of spare parts for supply offhand.

VOLUNTARY RESTRICTION OF DIET.

It is reported unofficially that the information reaching the Food Controller's department justifies the belief that housekeepers are making an effort to restrict domestic consumption of bread, meat, and sugar to the amounts recommended, that is to say, 4 lb. bread, 2½ lb. meat, and ¾ lb. sugar, weekly per head. It is said also that the reports as to panic buying by housekeepers to form hoards of non-perishable provisions have been exaggerated, and certainly there does not seem to be in present circumstances any need for panic.

We have been at the pains to estimate the value of the food supplied to three middle-class families during the present winter, and before Lord Devonport's appeal for restriction was made. The families consisted of 16 persons—3 men (sedentary), 9 women, and 4 children—and save for a certain amount of economy in buying, due to the increase in prices, and to a considerable diminution in the amount of sugar owing to the difficulty in obtaining it, there was no very noticeable alteration in the standard of living. The Committee of the Royal Society came to the conclusion, after a full consideration of

the dietary requirements of a nation for the most part engaged in active work, that they could not be met satisfactorily on a less supply in the food, as purchased, than 100 grams protein, 100 grams fat, and 500 grams carbohydrate, equal approximately to 3,400 calories per "man" per day, a "man" being an average workman doing an average day's work. Generally speaking, however, a woman or child requires less food than a man—that is, has a man-value less than unity. To convert the population of men, women, and children into units, or "men" as defined above, the total number must be reduced by 23 per cent. In reckoning diet, 100 men, women, and children equal 77 units or "men." The quantity of foodstuffs available during the period 1909-13 yielded:

	Protein.	Fat.	Carbo- hydrates.	Calories.
Per head ...	Grams. 87	Grams. 100	Grams. 440	3,091
Per man ...	113	130	571	4,009

According to the analysis made of the diet of the three families mentioned, the amount of protein and fat consumed was in excess of requirements, the amount of carbohydrate rather lower than the standard taken by the Committee, and the yield in calories considerably lower per head. The nutritive value of the fresh vegetables and the very small quantity of fish used were so small that they have not been taken into account.

Diet before Voluntary Restriction of Three Middle-class Families (16 Persons).

	Weekly Weight in Ounces.	Daily Yield in Grams.			Energy Value in Calories.
		Protein.	Fat.	Carbo- hydrate.	
Meat, sausages, bacon	50.5	23.8	52.4	1.1	663
Bread	58.0	18.7	2.8	123.1	580
Sugar	8.9	—	—	35.3	145
Totals	117.4	47.5	55.2	159.5	1388
Cheese	4.0	4.5	4.9	0.4	63.4
Butter, etc. ...	13.2	0.5	45.3	—	424.0
Potatoes... ..	32.0	2.27	0.13	27.2	122.0
Flour and oatmeal ...	7.0	16.2	2.3	21.3	103.0
Rice, lentils, etc. ...	11.6	1.6	0.7	24.3	270.0
Jam and dried fruits	3.8	3.7	0.2	8.7	37.8
Totals	71.6	28.77	53.53	81.9	1020.2
Total ration of re- stricted articles	—	47.5	55.2	159.5	1388
Total of extras ...	—	28.77	53.53	81.9	1020.2
		76.27	108.73	241.4	2408.2

The fallacy in this analysis is that it leaves out of account midday restaurant meals taken by three adult males. In Dr. Leonard Hill's report to the Health of Munition Workers Committee on an investigation of workers' food he gives an analysis of twelve canteen meals, from which it appears that they afforded on an average protein 42.43, fat 36.7, carbohydrate 146.9 grams, yielding 1,114 calories. To get the average effect of this addition it would appear that we may add to the totals in the table protein 8, fat 7, carbohydrate 27.5 grams, and calories 209, giving total values for the three households per head of protein 84.27, fat 115.73, carbohydrate 268.9 grams, yielding energy value in calories per head of 2617.2. As a set off a certain allowance ought to be made for meals given in the homes to occasional workers, but probably the effect of any such deduction on the figures here given would be very small. So far as our examination goes, therefore, it appears that the members of the middle-class families as to whom the inquiry was made received rather less protein, rather more fat, and considerably less carbohydrate than the standard per head of the whole population, and that the yield in calories was about 15 per cent. less (waste being neglected).